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**From:** Ryan, Kevin

**Sent:** Wed 1/15/2014 9:10:01 PM

**Subject:** FW: WaterISAC Advisory UPDATE: Water Restrictions Implemented in Response to Chemical Leak into West Virginia's Elk River

All: R9's toxicologist, Dr. Macler, has provided a bit of insight for the Elk River contaminant, MCHM.

**From:** Macler, Bruce

**Sent:** Tuesday, January 14, 2014 11:36 AM

**To:** R9-WTR6

**Subject:** FW: WaterISAC Advisory UPDATE: Water Restrictions Implemented in Response to Chemical Leak into West Virginia's Elk River

You may have already come to realize that, while not a lot is known about the toxicity of MCHM, it isn't particularly toxic. Like toluene and MTBE, taste and odor thresholds are orders of magnitude lower than overt toxicity.

Bruce

415 972-3569

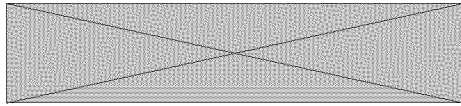
Solutions, not complaints

**From:** WaterISAC [<mailto:info@waterisac.org>]

**Sent:** Tuesday, January 14, 2014 9:51 AM

**To:** Macler, Bruce

**Subject:** WaterISAC Advisory UPDATE: Water Restrictions Implemented in Response to Chemical Leak into West Virginia's Elk River



Not for Public Dissemination

WaterISAC Members:

WaterISAC is continuing to track the incident involving the leak of the chemical 4-methylcyclohexane methanol into the Elk River at Charleston, West Virginia on Thursday, January 9, that resulted in water restrictions. Updates for Tuesday, January 14, are as follows:

- Water restrictions began being lifted on the afternoon of Monday, January 13. By the morning of Tuesday, January 14, water restrictions had been lifted in downtown Charleston, East End, Kanawha City, South Charleston, North Charleston, Edgewood, Southridge, and Southside. Four major hospitals in downtown Charleston are included in the lifted water restriction zones.
  - The ban is being lifted in a strict, methodical manner to help ensure the water system is not overwhelmed by excessive demand.
  - Customers are being informed of the lift zones through a variety of sources, including an interactive webpage ([click here to access](#)), automated phone calls, and the media.
    - Customers are also being informed that they must flush their plumbing systems once the restriction for their zone is lifted. Residential customers are being offered a credit of 1,000 gallons to complete the flush.
  - The interagency team of West Virginia Bureau for Public Health, West Virginia American Water, and the U.S. Army Corps of Engineers had announced that extensive testing had produced results showing that levels of 4-

methcyclohexane methanol were below one ppm. The U.S. Centers for Disease Control and Prevention and the U.S. Environmental Protection Agency do not anticipate any health effects from these levels.

- There have been no confirmed fatalities; a total of 234 residents (+65 from yesterday's report) have been treated at local hospitals, with 14 (+4) of those residents requiring admission.
  - Schools are open in five of the nine affected counties.
- The West Virginia Board of Education continues to monitor the situation to determine school closings for January 15.
- Remediation is currently focused on tank removal at the source of the leak.
  - Communities along the Ohio River as far west as Cincinnati, Ohio are taking precautions and monitoring the water supply for any chemical contamination.
  - The United States Coast Guard reports the Elk River safety zone remains in effect with no reported impacts to commercial traffic.
  - The Federal Staging Area in Charleston has received 4.9 million liters of water from FEMA.

WaterISAC will also post updates on a page dedicated to this incident on its secure Portal ([select this link to navigate to this page](#)).

Information about 4-methylcyclohexane methanol is available on this page. WaterISAC will also continue to post press releases indicating the lifting of water restrictions to this page.

Please contact me with any questions.

Very Respectfully,

Charles Egli  
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The above information is not to be released to the public, the media, or other personnel who do not have a valid need to know without prior approval of an authorized official.

# WaterISAC

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